IN THE DRAWINGS

Please amend the drawings as follows:

In the drawing, please delete reference numerals "8" and "10", and insert new reference numerals --8--, --8a--, --8b--, --8c--, --10--, and --16--, as shown in the attached Replacement Sheet and Annotated Sheet Showing Changes.

Please replace sheet 1/1 with the attached Replacement Sheet showing the only drawing on new sheet 1/1, with the changes indicated in red in the attached Annotated Sheet Showing Changes, attached as an appendix to the present amendment.

REMARKS

Claims 1-2, 4-5, and 11-12 are amended. Claims 1-8 and 11-12 are pending.

The drawing is amended to delete reference numerals "8" and "10", and insert new reference numerals --8--, --8a--, --8b--, --8c--, --10--, and --16--. Such amendments are shown in the attached Replacement Sheet, as well as being shown in red in the attached Annotated Sheet Showing Changes.

The amendments to the specification, drawings, and claims are based on the application as originally filed, so it is respectfully submitted that no new matter has been added.

In the office action, the drawings were objected to, specifically with regard to a rotor. The specification, claims, and drawings have been amended to clearly identify the rotor 16 and its connections to other components in the invention. Accordingly, reconsideration and withdrawal of the objection to the drawings are respectfully requested.

In the office action, claims 1-2 and 11-12 were rejected under 35 U.S.C. § 103(a) in view of U.S. Patent Number 5,136,220 to Philipp; and claims 1-8 were rejected under 35 U.S.C. § 103(a) in view of U.S. Published Application Number US 2004/0112616 A1 to Broghammer et al., U.S. Patent Number US 6,173,350 B1 to Hudson et al., and the Smart Battery Specification found at http://www.sbs-forum.org/specs/errata_sbdat110a.pdf.

Independent claims 1 and 11 are amended to clarify that at least power electronics (7) is arranged to be positioned entirely within a battery pack (4), and requires at least three interface contacts to establish connections between the battery pack and the electric motor.

Independent claim 1, as amended, recites a battery-operated electric hand tool machine, comprising a three-phase electric motor (2) in a machine housing (3), an exchangeable battery pack (4), and a control module (5) with a power electronics (7) for motor control of the electric motor (2) and protection of the battery pack (4), wherein at least the power electronics (7) of the control module (5) is arranged to be positioned entirely within the exchangeable battery pack (4) and connected to the electric motor (2) via at least three interface contacts (8).

Independent claim 11 recites a battery pack for exchangeable connection to an electric hand tool machine (1) having a three-phase electric motor (2), the battery pack comprising power electronics (7) arranged to be positioned entirely within the battery pack; and at least three interface contacts (8a, 8b, 8c) for electrically connecting the power electronics (7) with the electric motor (2).

The cited art of Philipp, Broghammer et al., Hudson et al., and the Smart Battery Specification, individually or in combination, does not disclose or suggest at least power electronics arranged to be positioned entirely within a battery pack, as in independent claims 1 and 11.

Philipp discloses a battery-operated electrical hand tool machine comprising a three-phase electric motor and a power electronics 10, but there is only two interface contacts VB, MG, as shown in the upper left corner of FIG. 1 of Philipp and on the bottom line of FIG. 2 of Philipp. The two interface contacts VB and MG of Philipp are between the exchangeable battery pack 22 and the power electronics 10 via a switch 21. However, the contacts D1-D3, cited by the examiner in the rejection of the present application, are the only contacts between the power electronics 10 and the winding of the electric motor 15, outside of the battery 22.

Thus, the present invention is not disclosed or suggested by Philipp, since in the present invention, the location and positioning of the power electronics (7) "entirely" inside of the battery pack, such as the "exchangeable battery pack 4" is not "absent any criticality" but is required to have, of necessity, "at least three (additional) interface contacts (8)" of the power electronics (7) "connected to the electric motor (2)" of the present invention.

These three additional interface contacts on the exchangeable battery pack of the present invention are completely missing and unnecessary in the Philipp apparatus. Furthermore, there is no disclosure or suggestion in Philipp of a need for any additional interface contacts, as required in the present invention.

Similarly, there is no disclosure or suggestion of additional interface contacts required or used in the remaining sited art of Broghammer et al., Hudson et al., and the Smart Battery Specification.

It is noted that the Broghammer et al. reference does not disclose or suggest any electrical or electronic components 5 arranged entirely in an exchangeable battery pack, as in the present invention, but instead Broghammer et al. only has such electrical or electronic components 5 facing outside the battery pack, as described on page 1, paragraph [0012] of Broghammer et al. Accordingly, such outside facing electrical or electronic components 5 are not entirely within the battery pack of the present invention, and moreover do not need the additional interface contacts as in the present invention.

The Hudson et al. and the Smart Battery Specification similarly do not have at least power electronics arranged to be positioned entirely within a battery pack, and do not require at least three interface contacts to establish connections between the battery pack and the electric motor, as in the present invention.

One having ordinary skill in the art would not look to Philipp, Broghammer et al., Hudson et al., and the Smart Battery Specification for the elements, steps, and features of amended claims 1 and 11, since there is no motivation in the cited art to isolate the battery pack from the electronics, as in the present invention, with at least three interface contacts utilized to establish connections between the battery pack and the electric motor, as in the present invention. Such separation of the battery pack from the electronics and the use of interface contacts in the present invention facilitates exchangeability of the battery pack from the remainder of the apparatus of the present invention.

Lacking such separation in the cited art of the battery pack from the electronics and the use of interface contacts, conversely, hamper exchangeability of the battery pack from the remainder of the apparatus in the cited art.

Accordingly, independent claims 1 and 11 are patentable over the cited art, so reconsideration and withdrawal of the rejections are respectfully requested.

Claims 2-8 and 12 depend from independent claims 1 and 11, and so include the recitation of amended claims 1 and 11. Therefore, for the reasons set forth above, claims 2-8 and 12 are also patentable over the cited art.

Therefore, claims 1-8 and 11-12 are patentable over the cited art, so reconsideration and withdrawal of the rejection of claims 1-8 and 11-12 are respectfully requested.

Accordingly, entry and approval of the present amendment and allowance of all pending claims are respectfully requested.

In case of any deficiencies in fees by the filing of the present amendment, the Commissioner is hereby authorized to charge such deficiencies in fees to Deposit Account Number 01-0035.

Respectfully submitted,

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Anthony J. Natoli
Registration number 36,223
Attorney for applicant

ABELMAN, FRAYNE & SCHWAB
666 Third Ave., 10th Floor
New York, NY 10017-5621
(212) 949-9022

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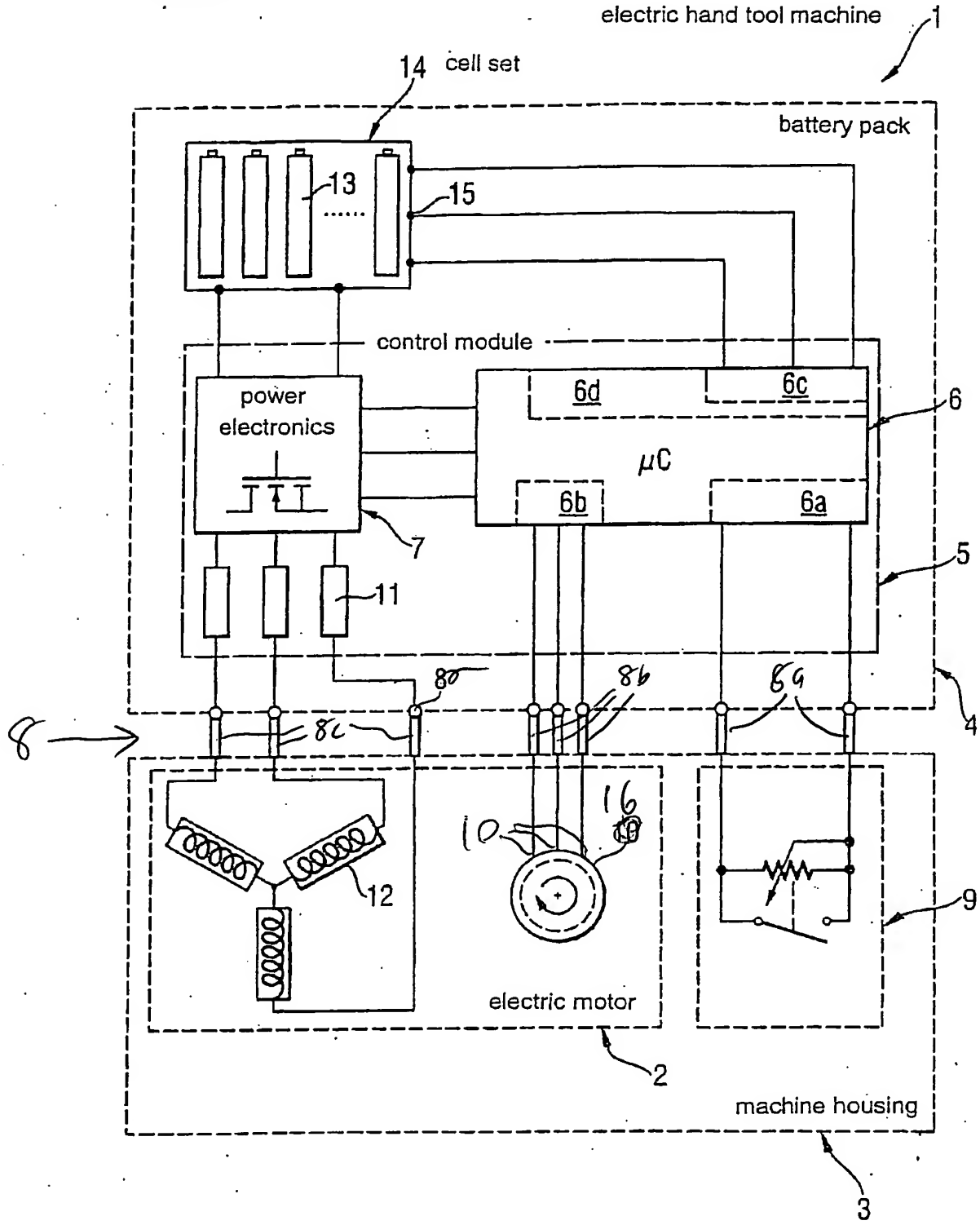
ANNOTATED SHEET SHOWING CHANGES